## **ABSTRACT**

## RADIO COMMUNICATION SYSTEM

A radio communication system comprises a communication channel between a transmitter having parts operating according to a plurality of radio standards and having a plurality of antennas and a receiver having parts operating according to a corresponding plurality of radio standards having at least one antenna. In such a system the communication channel comprises a plurality of paths having a range of characteristics. Data for transmission is generated by one or more applications and is transmitted using an appropriate radio standard.

In one embodiment, the data has one or more categories assigned to it, for example by the addition of tags by a tagging block indicating its importance or other requirements. Depending on the assigned categories and the characteristics of the paths, the data is mapped to one or more of the transmitter's parts and antennas to select a suitable radio air interface and transmission path.

(Figure 2)

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